Chapter 1

SYNCHRONIZATION

"There is still a tendency in each separate unit...to be a one-handed puncher. By that I mean that the rifleman wants to shoot, the tanker to charge, the artilleryman to fire...That is not the way to win battles. If the band played a piece first with the piccolo, then with the brass horn, then with the clarinet, and then with the trumpet, there would be a hell of a lot of noise but no music. To get the harmony in music each instrument must support the others. To get harmony in battle, each weapon must support the other. Team play wins. You musicians of Mars must not wait for the band leader to signal you...You must each of your own volition see to it that you come into this concert at the proper place and at the proper time..."

General George S. Patton, Jr., 8 July 1941, address to the men of the 2nd Armored Division, The Patton Papers, Vol. II, 1974

- 1-1. Synchronization is the arrangement of military actions in time, space and purpose to produce maximum relative combat power at a decisive place and time. Combined arms operations are the synchronized and simultaneous application of several arms, such as infantry, armor, aviation, artillery, engineer, intelligence, and air defense to achieve greater effects on the enemy than that achieved if each arm were used against the enemy in sequence or against separate objectives. The challenge to the combined arms commander is to achieve synchronization. While success in any battle, engagement, or operation is never guaranteed, its achievement is much more likely for the commander who can synchronize military actions.
- 1-2. The range of operations for which the combined arms commander must be able to synchronize military actions is broad. While primarily concentrating on offensive and defensive operations, he must also be able to synchronize his unit's activities during stability and support operations (SASO) when given those missions. In Chapter 2 this manual will address synchronization by defining important responsibilities for commanders and staff members of maneuver brigades and battalions.

1-3. FM 3-100.40 (100-40), Tactics, is the basic doctrinal reference for tactics. Knowledge of its contents is assumed for maneuver commanders. Similarly, armor and mechanized commanders delineate their tactics, techniques, and procedures (TTP) in the FM 71-series, infantry in the FM 7-series and aviation in the FM 1series. Combined arms commanders must *insist* that their FSCOORDs and FSOs understand the maneuver TTP of these manuals - fire supporters must take it upon themselves to become as well versed as possible in maneuver TTP. Conversely, FSCOORDs and FSOs should *recommend* that their supported commander become familiar with the TTP of this manual and with the respective FM 3-09-series fire support TTP manual for their level of command. In Chapter 3, this manual addresses synchronization within a framework of the tactics of fire support by providing considerations for the commander during offensive, defensive, stability, and support operations. These considerations should be used to ensure the major planning and executing *fundamentals* of fire support are recognized and their utilization thought out as a concept of the operation is formulated.

- 1-4. In Chapter 4, this manual approaches synchronization through a discussion of the techniques and procedures for planning, preparing for and executing an operation where maneuver and fire support decisions are integrated throughout.
- 1-5. Fire support plans that are not integrated with maneuver plans result in unsuccessful fires in support of the operation. Integrating fire support leads to synchronization. It requires the commander and his staff to think both maneuver and fires at each step of the military decision making process (MDMP). Conversely, it should also cause commanders and staff to think both fires and maneuver throughout the targeting process. At brigade and battalion, the targeting process can be subsumed within the MDMP and requires no more people, equipment or time than what is used already in the MDMP. The MDMP and targeting process requires the same people: the battle staff. Targeting merely requires each member of the battle staff to provide more specific information and clearer focus at each step of the MDMP.

Key Terms and Definitions1-6. Fire Planning. Fire planning is a continuous process, usually top-down driven or initiated, of planning and coordinating fire support requirements. Central to the process is the development and execution of essential fire support tasks (EFSTs). Conceptually, a fire plan is the logical sequence of executing EFSTs to support the concept of operation.

- 1-7. Targeting. Targeting is the process of selecting targets and matching the response to them, taking account of operational requirements and capabilities. It is a sub-process within the fire planning process specifically designed to manage only the DECIDE, DETECT, DELIVER and ASSESS (D³A) functions. Targeting occurs *within* the MDMP when the battle staff is developing an operations order (OPORD) (in this respect overlaying directly over many fire planning process functions) and occurs *outside* of the MDMP once the plan is completed (in this respect validating previous D³A decisions while planning for future D³A decisions).
- 1-8. Essential Fire Support Task. A task for fire support to accomplish that is required to support a combined arms operation. Failure to achieve an EFST may require the commander to alter his tactical or operational plan. A fully developed EFST has a task, purpose, method, and effects.

TASK: Describes the targeting objective that fires must achieve against a specific enemy formation's function or capability. These formations are high-payoff targets (HPTs) or contain one or more HPTs. TASK is normally expressed in terms of objective, formation, and function.

- Objective. Targeting objectives such as disrupt, delay, limit or destroy (per FM 6-20-10). Other terms can be used *as long* as you and the FSCOORD share the same understanding of those terms.
- Formation. A specific element or sub-element of the enemy. Can specify a specific vehicle type or target category as long as the mutual meaning (between maneuver commander and FSCOORD/FSO is clear).
- Function. A capability of the formation that is needed for it (the enemy formation) to achieve its primary task and purpose.

PURPOSE: Describes the maneuver or operational purpose for the task. Normally described *in terms of the maneuver purpose*. This should identify as specifically as possible the friendly maneuver formation that will benefit from the targeting objective and describe in space and time what the objective will accomplish.

METHOD: Describes *how* the task and purpose will be achieved. It ties the detect function to the deliver function in time and space and describes how to accomplish the task. Normally described in terms of priority, allocation and restriction. It is from the method of an EFST that subordinate units, including field artillery and target acquisition, get (some) of their essential tasks [essential field artillery tasks (EFAT) for artillery units].

- Priority. For detection assets, it assigns priorities for named area of interest (NAIs), target area of interest (TAIs), engagement areas (EAs), and/or HPTs to find. For deliver assets, it assigns the priority of which HPT that system will primarily be used against.
- Allocation. For both detection and deliver assets, it describes the allocation of assets to accomplish the EFST.
- Restriction. Describes constraints either requirements to do something; or prohibition on action. Normal considerations include ammunition restrictions and fire support coordinating measures.

EFFECTS: Quantifying the successful accomplishment of the task - provides a guide to determine when we are done with the task. One measure of effects is to determine if the purpose was met. If multiple delivery assets are involved, it helps clarify what each must accomplish. Effects determination also provide the basis for the assess function of targeting and contribute to the decision of whether to re-attack the target.

1-9. Essential Field Artillery Task (EFAT). A task for the field artillery that must be accomplished to achieve an EFST. Is called an EFAT. A fully developed EFAT has a task, purpose, method, and effects. The task describes the effects of fires against a specific enemy formation(s) (effects of fires = suppress, neutralize, destroy, screen, or obscure). (Note: Fire family of scatterable mines/suppression of enemy air defense (FASCAM/SEAD) are special cases.) The purpose is a summary of the task and purpose from the EFST. The method describes how the task will be accomplished by assigning responsibilities to the FA batteries, survey and battalion tactical operations center (BN TOC). Typically the method is described by covering three categories: priority, allocation, and restrictions.

Priority provides the batteries with priority of fires (POF) and priority of survey. *Allocations* include movement triggers, routes, position areas, azimuths of fire, targets [priority and final protective fires (FPFs)], and radar zones. *Restrictions* cover fire support coordinating measure (FSCMs) and survivability movement criteria. **Effects** are a quantification of the FA task and positioning of FA units.

- 1-10. Concept of Fires. The logical sequence of EFSTs that integrated with the scheme of maneuver will accomplish the mission and achieve the commander's intent. Allocates in broad terms the fire support assets to achieve the EFSTs. The concept of fires is the basis of the fires paragraph.
- 1-11. Scheme of Fires. The detailed, logical sequence of targets and fire support events to find and attack the HPTs. It details how we expect to execute the fire support plan in accordance with the time and space of the battlefield to accomplish the commander's essential fire support tasks. The products of the fire support (FS) annex: fire support execution matrix (FSEM), target list/overlay, and/or a modified target synchronization matrix (TSM) articulate the scheme of fires.